


**STATE OF UTAH**  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

FORM 3

AMENDED REPORT ☒

<b>APPLICATION FOR PERMIT TO DRILL</b>						<b>1. WELL NAME and NUMBER</b> Ute Tribal 21-14NN					
<b>2. TYPE OF WORK</b> DRILL NEW WELL <input checked="" type="checkbox"/> REENTER P&A WELL <input type="checkbox"/> DEEPEN WELL <input type="checkbox"/>						<b>3. FIELD OR WILDCAT</b> ANTELOPE CREEK					
<b>4. TYPE OF WELL</b> Oil Well Coalbed Methane Well: NO						<b>5. UNIT or COMMUNITIZATION AGREEMENT NAME</b> ANTELOPE CREEK					
<b>6. NAME OF OPERATOR</b> PETROGLYPH OPERATING CO						<b>7. OPERATOR PHONE</b> 208 685-7674					
<b>8. ADDRESS OF OPERATOR</b> 960 Broadway Ave, Ste 500, Bosie, ID, 83703						<b>9. OPERATOR E-MAIL</b> bwest@pgei.com					
<b>10. MINERAL LEASE NUMBER (FEDERAL, INDIAN, OR STATE)</b> 14-20-H62-3516			<b>11. MINERAL OWNERSHIP</b> FEDERAL <input type="checkbox"/> INDIAN <input checked="" type="checkbox"/> STATE <input type="checkbox"/> FEE <input type="checkbox"/>			<b>12. SURFACE OWNERSHIP</b> FEDERAL <input type="checkbox"/> INDIAN <input checked="" type="checkbox"/> STATE <input type="checkbox"/> FEE <input type="checkbox"/>					
<b>13. NAME OF SURFACE OWNER (if box 12 = 'fee')</b>						<b>14. SURFACE OWNER PHONE (if box 12 = 'fee')</b>					
<b>15. ADDRESS OF SURFACE OWNER (if box 12 = 'fee')</b>						<b>16. SURFACE OWNER E-MAIL (if box 12 = 'fee')</b>					
<b>17. INDIAN ALLOTTEE OR TRIBE NAME (if box 12 = 'INDIAN')</b> Ute Indian Tribe			<b>18. INTEND TO COMMINGLE PRODUCTION FROM MULTIPLE FORMATIONS</b> YES <input type="checkbox"/> (Submit Commingling Application) NO <input checked="" type="checkbox"/>			<b>19. SLANT</b> VERTICAL <input type="checkbox"/> DIRECTIONAL <input type="checkbox"/> HORIZONTAL <input type="checkbox"/>					
<b>20. LOCATION OF WELL</b>	<b>FOOTAGES</b>		<b>QTR-QTR</b>	<b>SECTION</b>	<b>TOWNSHIP</b>	<b>RANGE</b>	<b>MERIDIAN</b>				
<b>LOCATION AT SURFACE</b>	673 FSL 2094 FWL		SESW	21	5.0 S	3.0 W	U				
<b>Top of Uppermost Producing Zone</b>	10 FSL 1390 FWL		SESW	21	5.0 S	3.0 W	U				
<b>At Total Depth</b>	10 FSL 1390 FWL		SESW	21	5.0 S	3.0 W	U				
<b>21. COUNTY</b> DUCESNE			<b>22. DISTANCE TO NEAREST LEASE LINE (Feet)</b> 673			<b>23. NUMBER OF ACRES IN DRILLING UNIT</b> 533					
			<b>25. DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completed)</b> 1914			<b>26. PROPOSED DEPTH</b> MD: 6190 TVD: 6190					
<b>27. ELEVATION - GROUND LEVEL</b> 6353			<b>28. BOND NUMBER</b> BO4556			<b>29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLICABLE</b> 43-8342					
<b>Hole, Casing, and Cement Information</b>											
<b>String</b>	<b>Hole Size</b>	<b>Casing Size</b>	<b>Length</b>	<b>Weight</b>	<b>Grade &amp; Thread</b>	<b>Max Mud Wt.</b>	<b>Cement</b>	<b>Sacks</b>	<b>Yield</b>	<b>Weight</b>	
<b>Cond</b>	18	14	0 - 40	5.0	Unknown	10.0	Class G	25	1.17	15.8	
<b>Surf</b>	12.25	8.625	0 - 480	24.0	J-55 ST&C	15.8	Class G	220	1.17	15.8	
<b>Prod</b>	8.75	5.5	0 - 6190	15.5	J-55 LT&C	10.0	Class G	516	1.91	12.5	
							Class G	338	1.46	13.4	
<b>ATTACHMENTS</b>											
<b>VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES</b>											
<input checked="" type="checkbox"/> WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER						<input checked="" type="checkbox"/> COMPLETE DRILLING PLAN					
<input type="checkbox"/> AFFIDAVIT OF STATUS OF SURFACE OWNER AGREEMENT (IF FEE SURFACE)						<input type="checkbox"/> FORM 5. IF OPERATOR IS OTHER THAN THE LEASE OWNER					
<input checked="" type="checkbox"/> DIRECTIONAL SURVEY PLAN (IF DIRECTIONALLY OR HORIZONTALLY DRILLED)						<input checked="" type="checkbox"/> TOPOGRAPHICAL MAP					
<b>NAME</b> Ed Trotter				<b>TITLE</b> Agent				<b>PHONE</b> 435 789-4120			
<b>SIGNATURE</b>				<b>DATE</b> 05/31/2011				<b>EMAIL</b> edtrotter@easilink.com			
<b>API NUMBER ASSIGNED</b> 43013507970000				<b>APPROVAL</b>  Permit Manager							

CONFIDENTIAL  
EIGHT POINT PLAN

UTE TRIBAL 21-14NN  
SW/SE, SEC. 21, T5S, R3W  
DUCHESNE COUNTY, UTAH

**1. ESTIMATED TOPS OF IMPORTANT GEOLOGIC MARKERS:**

FORMATIONS	DEPTH	SUBSEA
Trona	2747	3637
Mahogany Shale	2896	3491
"B" Marker	3996	2410
"X" Marker	4473	1941
Douglas Creek	4618	1798
"B" Limestone	4996	1427
B/Castle Peak Limestone	5561	871
BSCARB	5988	452
Total Depth	6190	
Anticipated Maximum BHP	1900	

**2. ESTIMATED DEPTHS OF ANTICIPATED WATER, OIL, GAS OR MINERALS FORMATIONS:**

<u>Substance</u>	<u>Formation</u>	<u>Depth</u>	<u>Subsea</u>
Oil/Gas	Douglas Creek	4618	1798
Oil/Gas	B/Castle Peak	5561	871
Other mineral zones	N/A		

**3. PRESSURE CONTROL EQUIPMENT:** BOP Schematic Diagram attached.

**4. CASING PROGRAM:**

Hole	Casing	Top – MD	Bottom – MD	Weight lb/ft	Grade	Thread
18"	14"	sfc	40'	steel	cond	none
12 1/4"	8 5/8"	sfc	480'	24.0	J-55	STC
8 3/4"	5 1/2"	sfc	6190'	15.5	J-55	LTC

Casing Strengths:				Collapse	Burst	Tensile
8 5/8"	24.0 lb.	J-55	STC	1,370 psi	2,950 psi	263,000 lb
5 1/2"	15.5 lb.	J-55	LTC	4,040 psi	4,810 psi	239,000 lb

All casing will be new or inspected.

CONFIDENTIAL  
EIGHT POINT PLAN

UTE TRIBAL 21-14NN  
SW/SE, SEC. 21, T5S, R3W  
DUCHESNE COUNTY, UTAH

**5. MUD PROGRAM**

**INTERVAL**

0' - 480'  
480' - TD

**MUD TYPE**

Air/Aerated Water  
Water with DAP or DAP alternative  
Gel/polyacrylamide polymer w/5-10% LCM, LSND as conditions warrant

Sufficient mud inventory will be maintained on location during drilling to handle any adverse conditions that may arise.

**6. CEMENT PROGRAM:**

**20" Conductor:**

Cement to surface with construction cement.

**8 5/8" Casing: sfc - 500'**

**Lead/Tail Slurry: 0' - 500':** 220 sks (257 cu ft) Class G cement + 0.25 lbsk Cello Flake + 2% CaCl<sub>2</sub>. Slurry wt: 15.8 ppg, Slurry yield: 1.17 ft<sup>3</sup>/sk, Slurry volume: 12-1/4" hole + 30% excess. (Cement will be circulated to surface).

**5 1/2" Casing: sfc - 6190'**

**Lead Slurry: sfc - 4000':** 516 sks (986 cu ft) EXPANDACEM System (Class "G" + additives) + 1 lb/sx Granulite TR 1/4 (Lost Circulation Material) (12.5 PPG±, 1.91 ft<sup>3</sup>/sk) hole + 30% excess.

**Tail Slurry:**

**4000' - 6190':** 338 sx (493 cu ft) EXPANDACEM System (Class "G" + additives) + 1 lb/sx Granulite TR 1/4 (Lost Circulation Material) (13.4 ppg±, 1.46ft<sup>3</sup>/sk) hole + 30% excess. Cement will be circulated to surface.

**7. VARIANCE REQUESTS:**

- A. Petroglyph Operating Company, Inc. requests a variance to regulations requiring a straight run blooie line during drilling of surface hole.
- B. Petroglyph Operating Company, Inc. requests a variance to regulations requiring an automatic ignitor or continuous pilot light on the blooie line during drilling of surface hole.

**CONFIDENTIAL**  
**EIGHT POINT PLAN**

**UTE TRIBAL 21-14NN  
SW/SE, SEC. 21, T5S, R3W  
DUCHESNE COUNTY, UTAH**

C. Petroglyph Operating Company, Inc. requests a variance to regulations requiring 100' of blooie line discharge from the well head during drilling of surface hole.

D. Petroglyph Operating Company, Inc. requests a variance to regulations for compressors to be 100' from well head during drilling of surface hole.

**8. EVALUATION PROGRAM:**

Logs: Platform Express TD to base of surface casing  
(DLL, MSFL, CNG, CDL, GR)

Cores: None anticipated  
DST: None Programmed

Completion: To be submitted at a later date.

**9. ABNORMAL CONDITIONS:**

None anticipated.

**10. STANDARD REQUIRED EQUIPMENT:**

None Required

**11. HAZARDOUS CHEMICALS:**

No chemicals subject to reporting under SARA title III in an amount equal to or greater than 10,000 pounds will be used, produced, stored, transported, or disposed of annually in association with the drilling of this well. Furthermore, no extremely hazardous substances, as defined in 40 CFR 355, in threshold planning quantities, will be used, produced, stored, transported, or disposed of in association with the drilling of this well.

(Attachment: BOP Schematic Diagram)

T5S, R3W, U.S.B.&amp;M.

PETROGLYPH OPERATING CO., INC.

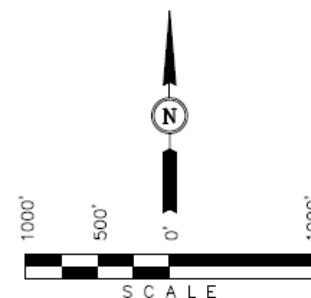
Well location, UTE TRIBAL #21-14NN, located as shown in the SE 1/4 SW 1/4 of Section 21, T5S, R3W, U.S.B.&M., Duchesne County, Utah.

## BASIS OF ELEVATION

BRASS CAP SET IN CONCRETE BY SUNRISE ENGINEERING LOCATED IN THE SE 1/4 OF SECTION 16, T5S, R3W, U.S.B.&M. SAID ELEVATION IS MARKED AS BEING 6281.9 FEET.

## BASIS OF BEARINGS

BASIS OF BEARINGS IS A G.P.S. OBSERVATION.



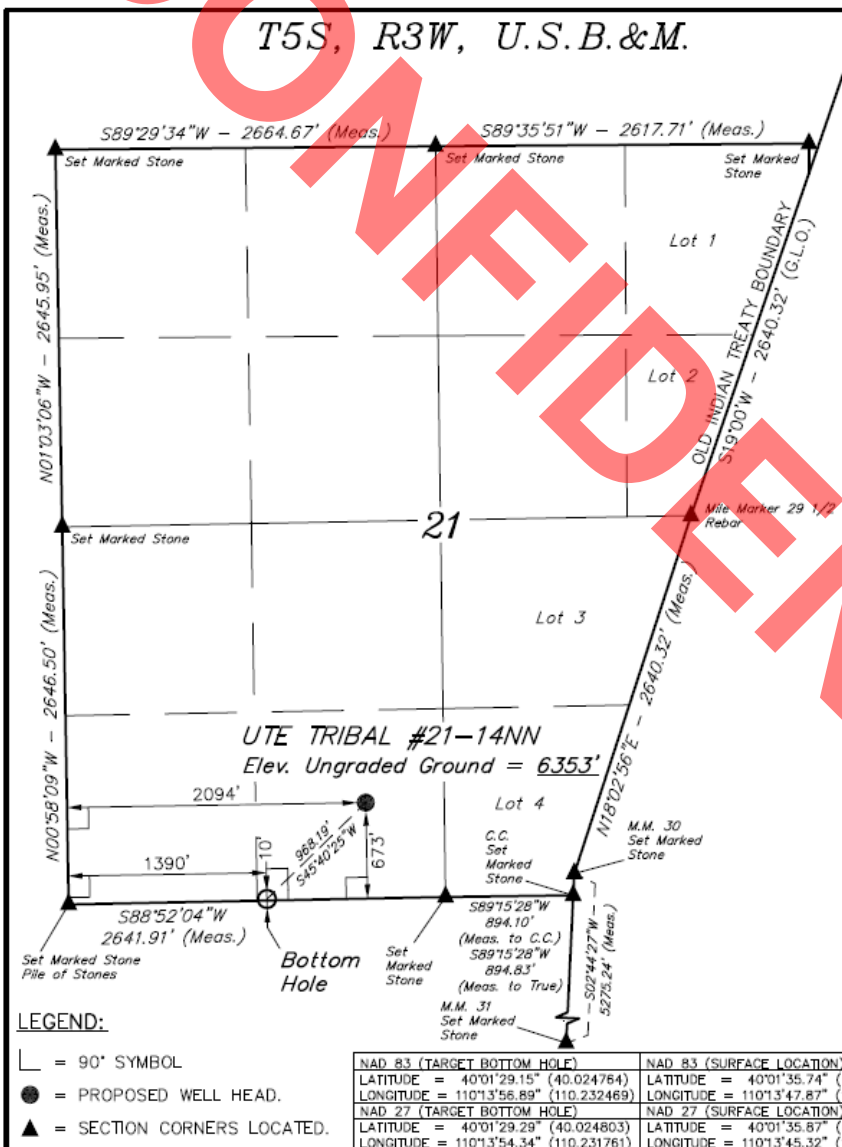
## CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

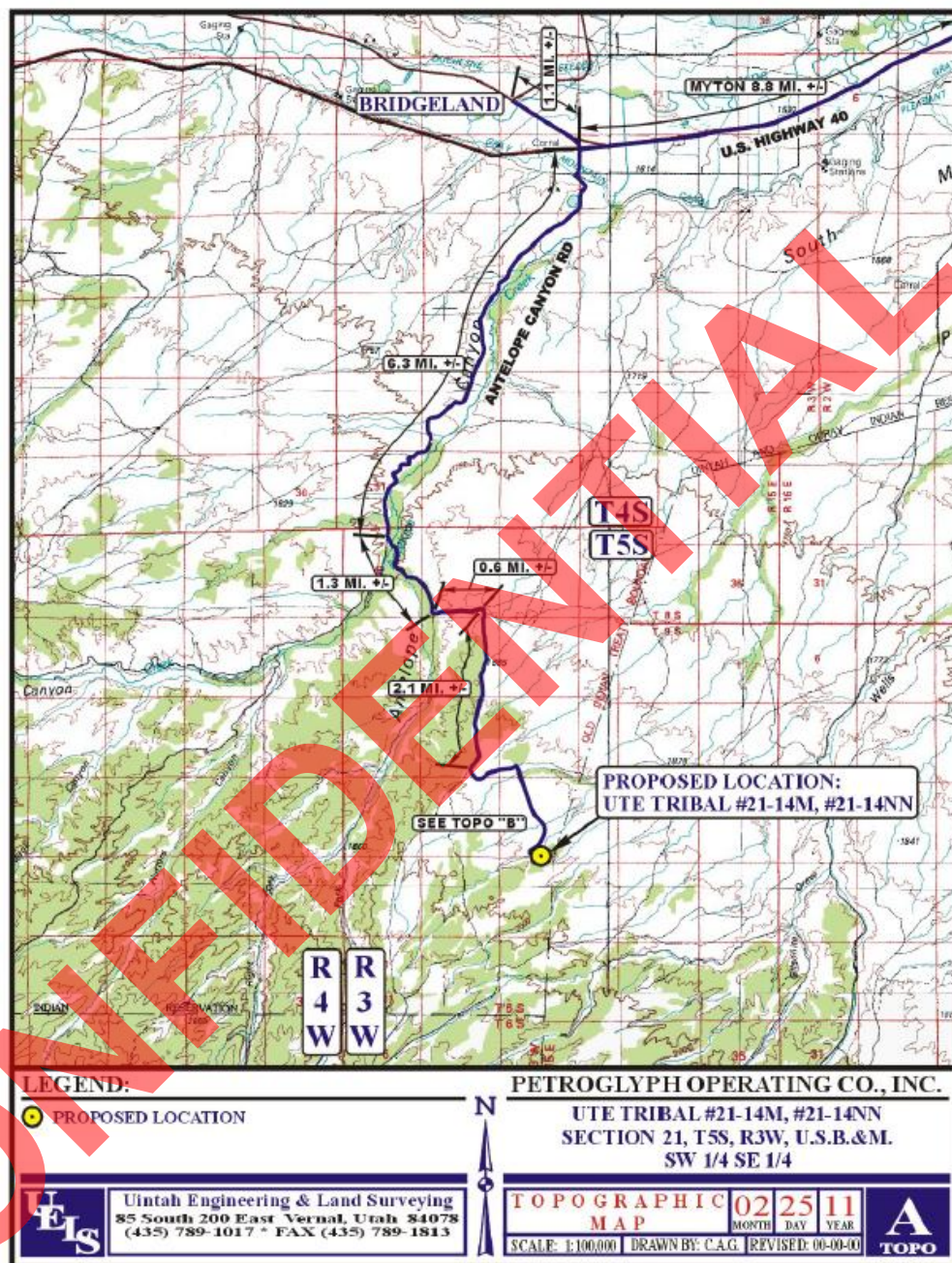
REGISTERED LAND SURVEYOR  
REGISTRATION NO. 161319  
STATE OF UTAH

UINTAH ENGINEERING & LAND SURVEYING  
85 SOUTH 200 EAST - VERNAL, UTAH 84078  
(435) 789-1017

SCALE 1" = 1000'	DATE SURVEYED: 02-15-11	DATE DRAWN: 03-02-11
PARTY G.S. G.B.. C.C.	REFERENCES G.L.O. PLAT	
WEATHER COLD	FILE PETROGLYPH OPERATING CO., INC.	









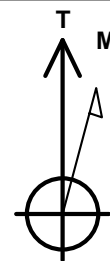
**Scientific Drilling**  
Rocky Mountain Operations

Company: Petroglyph Operating Co. Inc.  
Project: Duchesne County, UT NAD83  
Site: UTE Tribal 21-14NN  
Well: UT 21-14NN  
Wellbore: Wellbore #1

Petroglyph Operating Co. Inc.

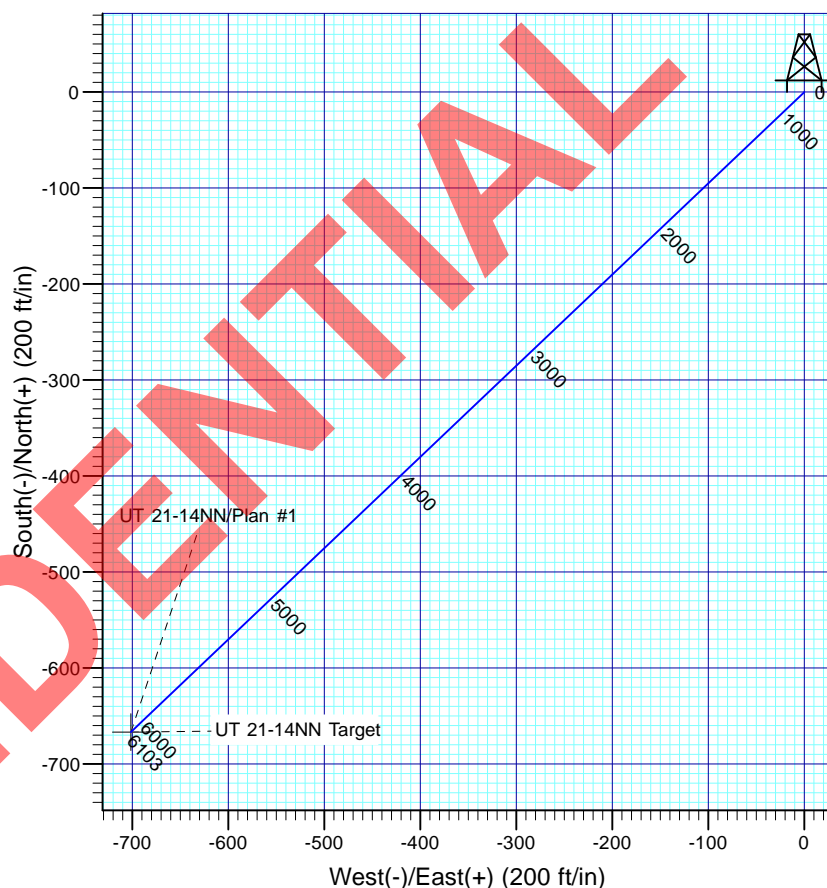
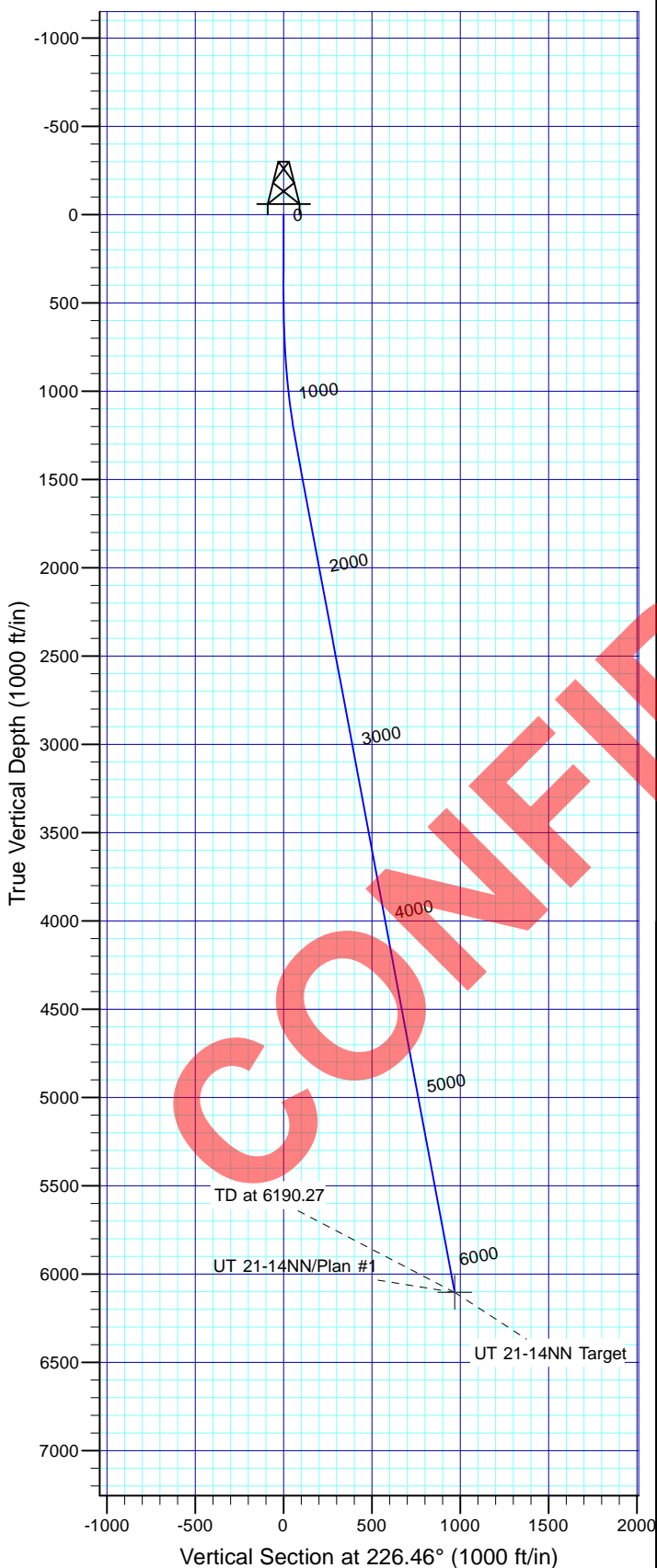
Well Details: UT 21-14NN

TVD Reference: WELL @ 6353.00ft (Original Well Elev) Ground Level: 0.00  
+N/-S +E/-W Northing Easting Latitude Longitude  
0.00 0.00 7180935.64 1996049.78 40° 1' 35.740 N 110° 13' 47.870 W



Azimuths to True North  
Magnetic North: 11.40°

Magnetic Field  
Strength: 52248.5nT  
Dip Angle: 65.75°  
Date: 4/7/2011  
Model: IGRF2010



Plan: Plan #1

15:23, April 08 2011  
Created By: Janie Cooke

OBJECT DETAILS: Duchesne County, UT NAD83

Geodetic System: US State Plane 1983  
Datum: North American Datum 1983  
Ellipsoid: GRS 1980  
Zone: Utah Central Zone

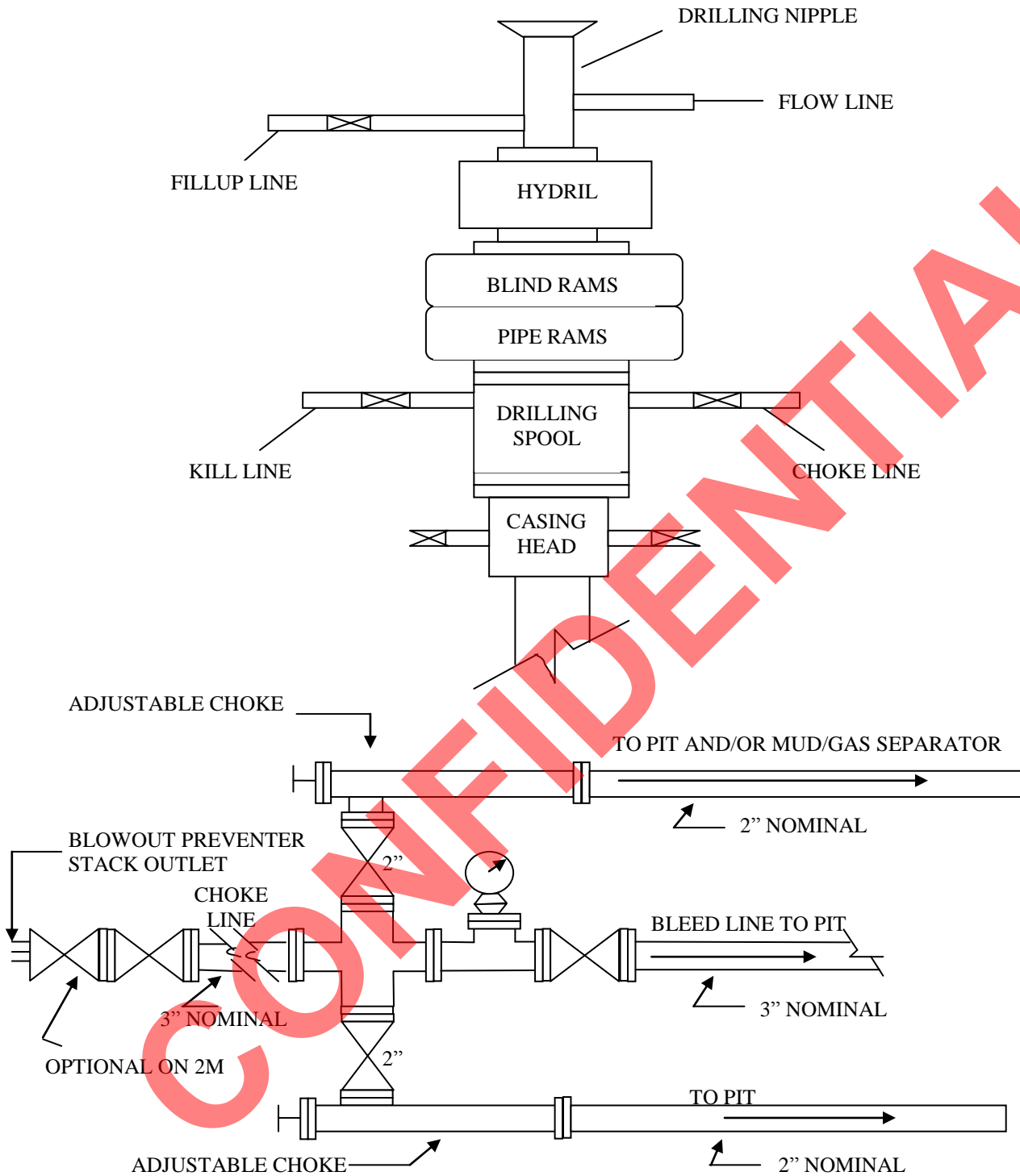
System Datum: Mean Sea Level

#### SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	V Sect	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	
3	3347.01	10.59	226.46	1342.19	-53.76	-56.57	1.25	226.46	78.04	
4	6190.27	10.59	226.46	6103.00	-666.77	-701.64	0.00	0.00	967.93	UT 21-14NN Target

RECEIVED: Jun. 07, 2011

## SCHEMATIC DIAGRAM OF 2000 PSI BOP STACK





**PETROGLYPH OPERATING CO., INC.**  
**P.O. BOX 607**  
**ROOSEVELT, UTAH 84066**

May 23, 2011

Ms. Diana Mason  
State of Utah  
Division of Oil, Gas & Mining  
1594 West North Temple, Suite 1210  
P.O. Box 145801  
Salt Lake City, UT 84114-5801

Re: **Directional** Drilling R649-3-11

Ute Tribal 21-14NN: 673' FSL & 2094' FWL, SE/SW (Surface)  
10' FSL & 1390' FWL, SE/SW (Bottom Hole)  
Sec. 21, T5S, R3W, U.S.B.&M.,  
Duchesne County, Utah

Dear Ms. Mason,

Pursuant to the filing of Petroglyph Operating Co., Inc.'s Application for Permit to Drill regarding the above referenced well on May 23, 2011, we are hereby submitting this letter in accordance with Oil & Gas Conservation Rule R649-3-11 pertaining to the Exception to Location and Siting of Wells.

- The Ute Tribal 21-14NN is located within the Antelope Creek Unit Area.
- Petroglyph Operating Co., Inc. is permitting this well as a **directional** well in order to minimize surface disturbance. Locating the well at the surface location and directionally drilling from this location, Petroglyph Operating Co., Inc. will be able to utilize the existing road and pipelines in the area.
- Furthermore, Petroglyph Operating Co., Inc. hereby certifies that it is the sole working interest owner within 460 feet of the entire directional well bore.

Therefore, based on the above stated information, Petroglyph Operating Co., Inc. requests the permit be granted pursuant to R649-3-11.

Respectfully Submitted,

Ed Trotter,  
Agent  
P.O. Box 1910  
Vernal, UT 84078  
Phone: (435)789-4120  
Fax: (435)789-1420  
E-mail: edtrotter@easilink.com

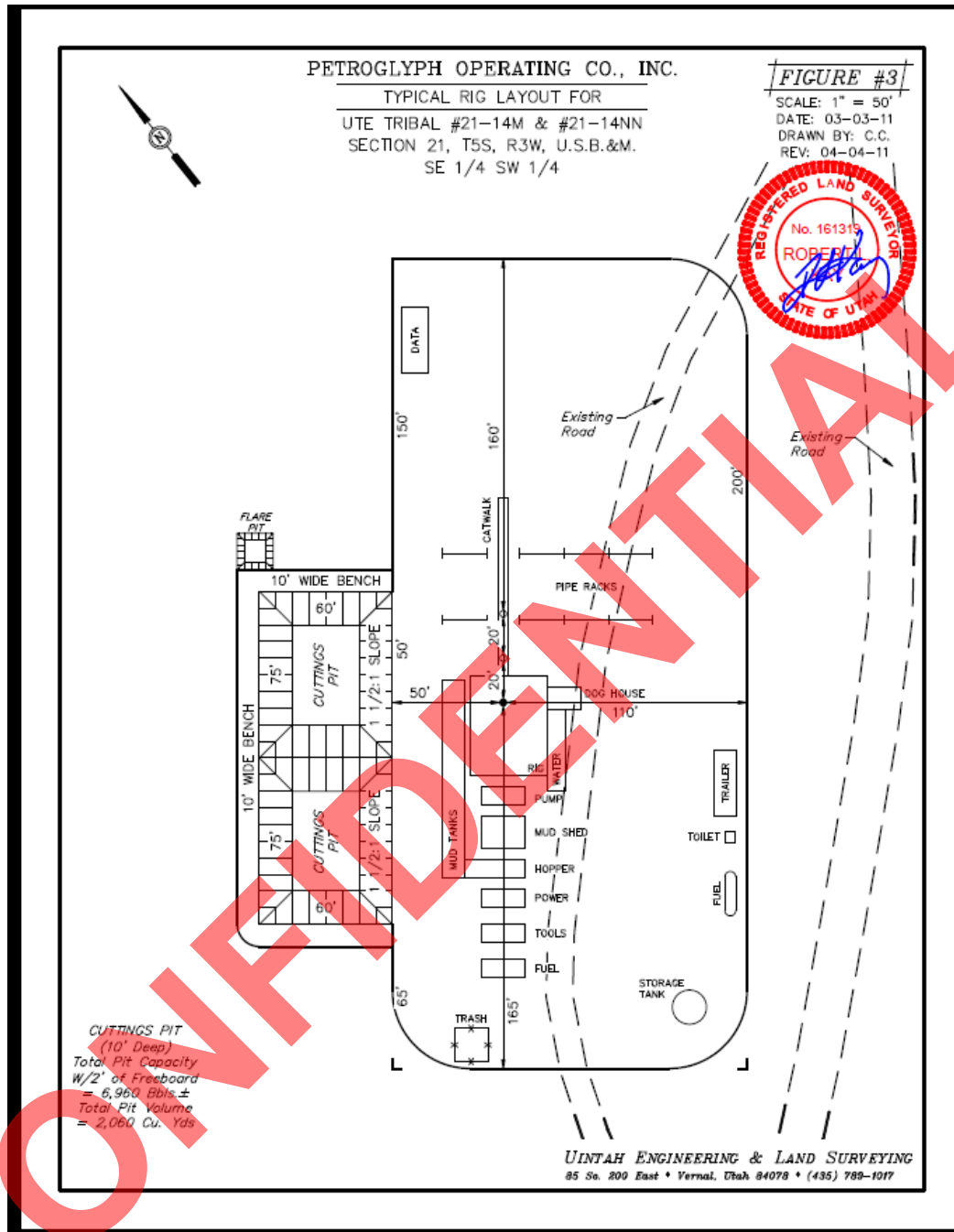
### Certification

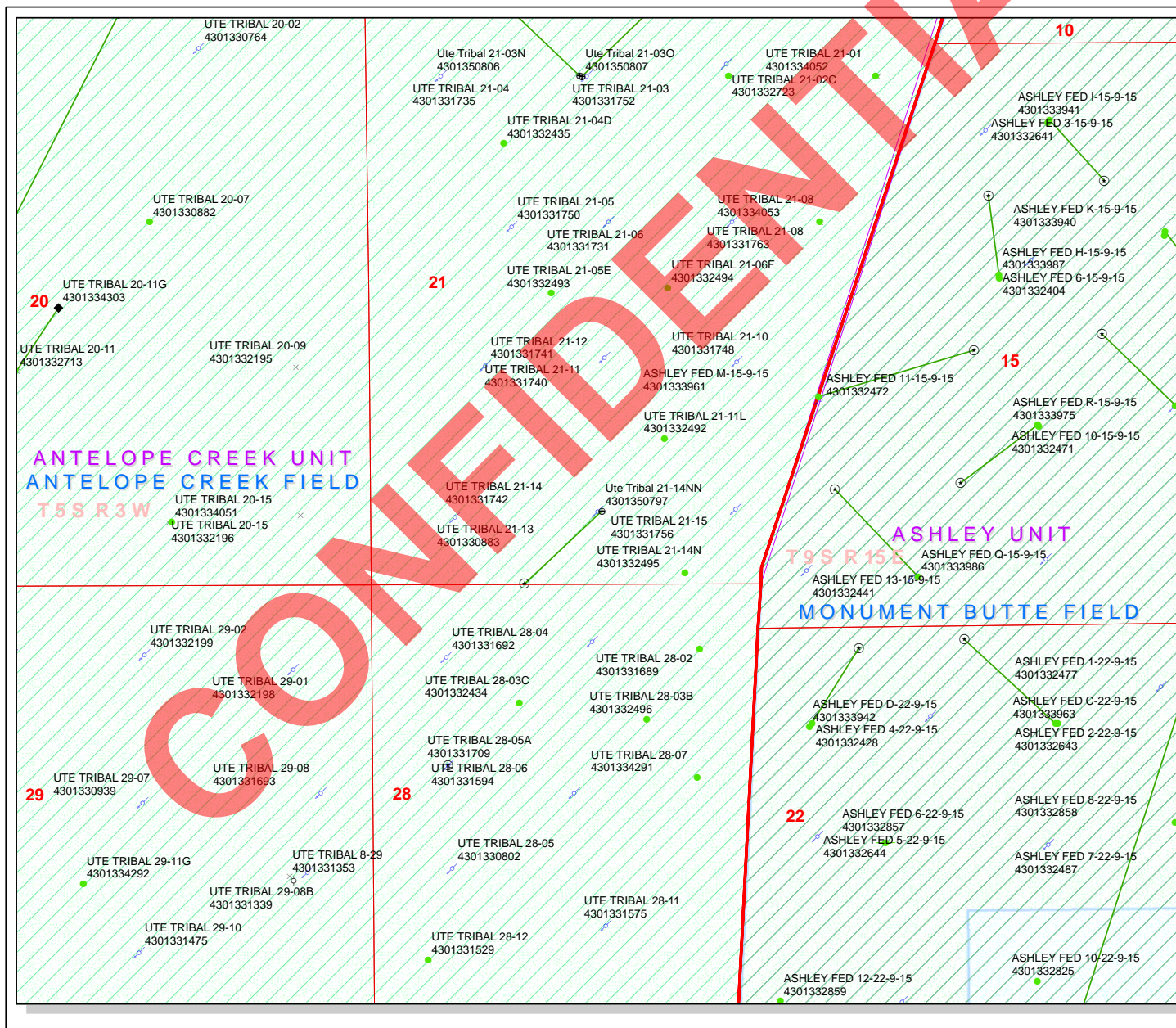
I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions that presently exist; that the statements made in the Plan are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by Petroglyph Operating Co., Inc. and its contractors and subcontractors in conformity with this Plan and the terms and conditions under which it is approved.

Please be advised that Petroglyph Operating Co., Inc. is considered to be the operator of the **UTE TRIBAL 21-14NN Well, located in the SE/SW of Section 21, T5S, R3W, Duchesne County, Utah; Lease #14-20-H62-3516;** and is responsible under the terms and conditions of the lease for the operations conducted upon the leased lands. Bond Coverage is provided under Bond #BO 4556.

\_\_\_\_\_  
Date

\_\_\_\_\_  
Ed Trotter, as Agent for  
Petroglyph Operating Co., Inc.

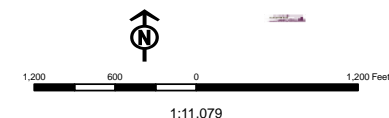




**API Number: 4301350797**  
**Well Name: Ute Tribal 21-14NN**  
**Township T0.5 . Range R0.3 . Section 21**  
**Meridian: UBM**  
**Operator: PETROGLYPH OPERATING CO**

Map Prepared:  
Map Produced by Diana Mason

Units	Wells Query
<b>STATUS</b>	<b>Status</b>
ACTIVE	APD - Approved Permit
EXPLORATORY	DRL - Spudded (Drilling Commenced)
GAS STORAGE	GIW - Gas Injection
NF PP OIL	GS - Gas Storage
NF SECONDARY	LA - Location Abandoned
PI OIL	LOC - New Location
PP GAS	OPS - Operation Suspended
PP GEOTHERMAL	PA - Plugged Abandoned
PP OIL	PGW - Producing Gas Well
SECONDARY	POW - Producing Oil Well
TERMINATED	RET - Returned APD
<b>Fields</b>	<b>Status</b>
Unknown	SGW - Shut-in Gas Well
ABANDONED	SOW - Shut-in Oil Well
ACTIVE	TA - Temp. Abandoned
COMBINED	TW - Test Well
INACTIVE	WDW - Water Disposal
STORAGE	WIW - Water Injection Well
TERMINATED	WSW - Water Supply Well
Sections	
Township	





## WORKSHEET APPLICATION FOR PERMIT TO DRILL

**APD RECEIVED:** 5/31/2011**API NO. ASSIGNED:** 43013507970000**WELL NAME:** Ute Tribal 21-14NN**OPERATOR:** PETROGLYPH OPERATING CO (N3800)**PHONE NUMBER:** 435 789-4120**CONTACT:** Ed Trotter**PROPOSED LOCATION:** SESW 21 050S 030W**Permit Tech Review:** ☒**SURFACE:** 0673 FSL 2094 FWL**Engineering Review:** ☐**BOTTOM:** 0010 FSL 1390 FWL**Geology Review:** ☒**COUNTY:** DUCHESNE**LATITUDE:** 40.02662**LONGITUDE:** -110.22927**UTM SURF EASTINGS:** 565766.00**NORTHINGS:** 4430786.00**FIELD NAME:** ANTELOPE CREEK**LEASE TYPE:** 2 - Indian**LEASE NUMBER:** 14-20-H62-3516**PROPOSED PRODUCING FORMATION(S):** CASTLE PEAK**SURFACE OWNER:** 2 - Indian**COALBED METHANE:** NO**RECEIVED AND/OR REVIEWED:**

- ☒ **PLAT**
- ☒ **Bond:** INDIAN - BO4556
- ☐ **Potash**
- ☐ **Oil Shale 190-5**
- ☐ **Oil Shale 190-3**
- ☐ **Oil Shale 190-13**
- ☒ **Water Permit:** 43-8342
- ☐ **RDCC Review:**
- ☐ **Fee Surface Agreement**
- ☐ **Intent to Commingle**
- Commingle Approved**

**LOCATION AND SITING:**

- ☐ **R649-2-3.**
- Unit:** ANTELOPE CREEK
- ☐ **R649-3-2. General**
- ☐ **R649-3-3. Exception**
- ☒ **Drilling Unit**
- Board Cause No:** Cause 214-2
- Effective Date:** 6/9/2000
- Siting:** Suspends General Siting
- ☒ **R649-3-11. Directional Drill**

**Comments:** Presite Completed  
IRR SEC:**Stipulations:** 4 - Federal Approval - dmason  
15 - **Directional** - dmason**RECEIVED:** Jun. 07, 2011



GARY R. HERBERT  
*Governor*

GREGORY S. BELL  
*Lieutenant Governor*

## State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER  
*Executive Director*

Division of Oil, Gas and Mining

JOHN R. BAZA  
*Division Director*

### Permit To Drill

\*\*\*\*\*

**Well Name:** Ute Tribal 21-14NN  
**API Well Number:** 43013507970000  
**Lease Number:** 14-20-H62-3516  
**Surface Owner:** INDIAN  
**Approval Date:** 6/7/2011

**Issued to:**

PETROGLYPH OPERATING CO, 960 Broadway Ave, Ste 500, Bosie, ID 83703

**Authority:**

Pursuant to Utah Code Ann. §40-6-1 et seq., and Utah Administrative Code R649-3-1 et seq., the Utah Division of Oil, Gas and Mining issues conditions of approval, and permit to drill the listed well. This permit is issued in accordance with the requirements of Cause 214-2. The expected producing formation or pool is the CASTLE PEAK Formation(s), completion into any other zones will require filing a Sundry Notice (Form 9). Completion and commingling of more than one pool will require approval in accordance with R649-3-22.

**Duration:**

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date

**General:**

Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

**Conditions of Approval:**

State approval of this well does not supercede the required federal approval, which must be obtained prior to drilling.

In accordance with Utah Admin. R.649-3-11, Directional Drilling, the operator shall submit a complete angular deviation and directional survey report to the Division within 30 days following completion of the well.

**Notification Requirements:**

The operator is required to notify the Division of Oil, Gas and Mining of the following actions during drilling of this well:

- Within 24 hours following the spudding of the well – contact Carol Daniels at 801-538-5284 (please leave a voicemail message if not available)

OR

submit an electronic sundry notice (pre-registration required) via the Utah Oil & Gas website at <http://oilgas.ogm.utah.gov>

**Reporting Requirements:**



All reports, forms and submittals as required by the Utah Oil and Gas Conservation General Rules will be promptly filed with the Division of Oil, Gas and Mining, including but not limited to:

- Entity Action Form (Form 6) – due within 5 days of spudding the well
- Monthly Status Report (Form 9) – due by 5th day of the following calendar month
- Requests to Change Plans (Form 9) – due prior to implementation
- Written Notice of Emergency Changes (Form 9) – due within 5 days
- Notice of Operations Suspension or Resumption (Form 9) – due prior to implementation
- Report of Water Encountered (Form 7) – due within 30 days after completion
- Well Completion Report (Form 8) – due within 30 days after completion or plugging

**Approved By:**

A handwritten signature in black ink, appearing to read "John Rogers", written over a horizontal line.

For John Rogers  
Associate Director, Oil & Gas

RECEIVED

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENTJUL 29 2011  
May 25 2011  
BLM VERNAL, UTAHFORM APPROVED  
OMB No. 1004-0137  
Expires July 31, 2010

## APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work: ☒ DRILL ☐ REENTER

1b. Type of Well: ☒ Oil Well ☐ Gas Well ☐ Other ☐ Single Zone ☒ Multiple Zone

2. Name of Operator  
**PETROGLYPH OPERATING CO., INC.**

3a. Address **P.O. BOX 1910  
VERNAL, UT 84078**

3b. Phone No. (Include area code)  
**(435)789-4120**

4. Location of Well (Report location clearly and in accordance with any State requirements. \*)  
At surface **673' FSL, 2094' FWL, SE/SW, SEC. 21, T5S, R3W**  
Bottom Hole: **10' FSL, 1390' FWL, SE/SW, SEC. 21, T5S, R3W**  
At proposed prod. Zone

14. Distance in miles and direction from nearest town or post office\*  
**21.1 MILES SOUTHWEST OF MYTON, UTAH**

15. Distance from proposed\*  
location to nearest  
property or lease line, ft. **673'**  
(Also to nearest drig. Unit line, if any)

16. No. of Acres in lease  
**533.33**

17. Spacing Unit dedicated to this well

18. Distance from proposed location\*  
to nearest well, drilling, completed, **See Topo**  
applied for, on this lease, ft. **Map "C"**

19. Proposed Depth  
**6190' TMD**  
**6103' TVD**

20. BLM/BIA Bond No. on file  
**BO 4556**

21. Elevations (Show whether DF, KDB, RT, GL, etc.)  
**6353.3 FEET GRADED GROUND**

22. Approximate date work will start\*  
**UPON APPROVAL**

23. Estimated duration  
**10 DAYS**

## 24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification.
6. Such other site specific information and/or plans as may be required by the BLM.

25. Signature

Name (Printed/Typed)  
**Ed Trotter**

Date  
**May 23, 2011**

Title  
**Agent**

Approved by (Signature)

Name (Printed/Typed)

Date

Title

**Assistant Field Manager  
Lands & Mineral Resources**

Office

**VERNAL FIELD OFFICE**

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Conditions of Approval, if any, are attached.

**CONDITIONS OF APPROVAL ATTACHED**

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

\*(Continued on page 2)

**NOTICE OF APPROVAL**

DIV. OF OIL, GAS & MINING

**UDOGM**

OCT 21 2011



UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
VERNAL FIELD OFFICE

170 South 500 East

VERNAL, UT 84078

(435) 781-4400



**CONDITIONS OF APPROVAL FOR APPLICATION FOR PERMIT TO DRILL**

Company:	Petroglyph Operating Co., Inc.	Location:	SESW, Sec. 21 T5S R3W USM
Well No:	Ute Tribal 21-14NN	Lease No:	14-20-H62-3516
API No:	43-013-50797	Agreement:	14-20-H62-4650

**OFFICE NUMBER: (435) 781-4400**

**OFFICE FAX NUMBER: (435) 781-3420**

**A COPY OF THESE CONDITIONS SHALL BE FURNISHED TO YOUR  
FIELD REPRESENTATIVE TO INSURE COMPLIANCE**

All lease and/or unit operations are to be conducted in such a manner that full compliance is made with the applicable laws, regulations (43 CFR Part 3160), and this approved Application for Permit to Drill including Surface and Downhole Conditions of Approval. The operator is considered fully responsible for the actions of his subcontractors. A copy of the approved APD must be on location during construction, drilling, and completion operations. **This permit is approved for a two (2) year period, or until lease expiration, whichever occurs first. An additional extension, up to two (2) years, may be applied for by sundry notice prior to expiration.**

**NOTIFICATION REQUIREMENTS**

Construction Activity (Notify Ute Tribe Energy & Minerals Dept. and BLM Environmental Scientist)	-	The Ute Tribe Energy & Minerals Dept. and BLM Environmental Scientist shall be notified at least 48 hours in advance of any construction activity. The Ute Tribal office is open Monday through Thursday.
Construction Completion (Notify Ute Tribe Energy & Minerals Dept. and BLM Environmental Scientist)	-	Upon completion of the pertinent APD/ROW construction, notify the Ute Tribe Energy & Minerals Dept. for a Tribal Technician to verify the Affidavit of Completion. Notify the BLM Environmental Scientist prior to moving on the drilling rig.
Spud Notice (Notify BLM Petroleum Engineer)	-	Twenty-Four (24) hours prior to spudding the well.
Casing String & Cementing (Notify BLM Supv. Petroleum Tech.)	-	Twenty-Four (24) hours prior to running casing and cementing all casing strings to: <a href="mailto:ut_vn_opreport@blm.gov">ut_vn_opreport@blm.gov</a> .
BOP & Related Equipment Tests (Notify BLM Supv. Petroleum Tech.)	-	Twenty-Four (24) hours prior to initiating pressure tests.
First Production Notice (Notify BLM Petroleum Engineer)	-	Within Five (5) business days after new well begins or production resumes after well has been off production for more than ninety (90) days.

**SURFACE USE PROGRAM  
CONDITIONS OF APPROVAL (COAs)**

**Additional Stipulations:**

- 1) All areas of disturbance (including surface pipelines) must have appropriate surface use agreements or approvals in place with the proper owner and/or agency before such action is started.
- 2) The conditions as set forth by those owners and/or agencies.

**General Conditions of Approval:**

- A 30' foot corridor right-of-way shall be approved. Upon completion of each pipeline in corridor, they shall be identified and filed with the Ute Tribe.
- A qualified Archaeologist accompanied by a Tribal Technician will monitor trenching construction of pipeline.
- The Ute Tribe Energy & Minerals Department is to be notified, in writing 48 hours prior to construction of pipeline.
- Construction Notice shall be given to the department on the Ute Tribe workdays, which are Monday through Thursday. The Company understands that they may be responsible for costs incurred by the Ute Tribe after hours.
- The Company shall inform contractors to maintain construction of pipelines within the approved ROW's.
- The Company shall assure the Ute Tribe that "ALL CONTRACTORS, INCLUDING SUB-CONTRACTORS, LEASING CONTRACTORS, AND ETC." have acquired a current and valid Ute Tribal Business License and have "Access Permits" prior to construction, and will have these permits in all vehicles at all times.
- You are hereby notified that working under the "umbrella" of a company does not allow you to be in the field, and can be subject to those fines of the Ute Tribe Severance Tax Ordinance.
- Any deviation of submitted APD's and ROW applications the Companies will notify the Ute Tribe and BIA in writing and will receive written authorization of any such change with appropriate authorization.
- The Company will implement "Safety and Emergency Plan." The Company's safety director will ensure its compliance.
- All Company employees and/or authorized personnel (sub-contractors) in the field will have approved applicable APD's and/or ROW permits/authorizations on their person(s) during all phases of construction.
- All vehicular traffic, personnel movement, construction/restoration operations should be confined to the area examined and approved, and to the existing roadways and/or evaluated access routes.
- All personnel will refrain from collecting artifacts, any paleontological fossils, and from disturbing any significant cultural resources in the area.
- The personnel from the Ute Tribe Energy & Minerals Department will be notified should cultural remains from subsurface deposits be exposed or identified during construction. All construction will cease.
- All mitigative stipulations contained in the Bureau of Indian Affairs Site Specific Environmental Assessment (EA) will be strictly adhered.
- Upon completion of Application for Corridor Right-Way, the company will notify the Ute Tribe Energy & Minerals Department, so that a Tribal Technician can verify Affidavit of Completion.

**DOWNHOLE PROGRAM  
CONDITIONS OF APPROVAL (COAs)**

**SITE SPECIFIC DOWNHOLE COAs:**

- Production casing cement shall be brought up and into the surface.
- A variance is granted for Onshore Order #2 Drilling Operations III. E. "Blooie line discharge 100 feet from well bore and securely anchored" Blooie line can be 75 feet.
- All requirements will be adhered to covering air/gas drilling operations as described in Onshore Order #2 III. E. 1. Drilling Operations, Special Drilling Operations, air/gas drilling.

**All provisions outlined in Onshore Oil & Gas Order #2 Drilling Operations shall be strictly adhered to.** The following items are emphasized:

**DRILLING/COMPLETION/PRODUCING OPERATING STANDARDS**

- The spud date and time shall be reported orally to Vernal Field Office within 24 hours of spudding.
- Notify Vernal Field Office Supervisory Petroleum Engineering Technician at least 24 hours in advance of casing cementing operations and BOPE & casing pressure tests.
- All requirements listed in Onshore Order #2 III. E. Special Drilling Operations are applicable for air drilling of surface hole.
- Blowout prevention equipment (BOPE) shall remain in use until the well is completed or abandoned. Closing unit controls shall remain unobstructed and readily accessible at all times. Choke manifolds shall be located outside of the rig substructure.
- All BOPE components shall be inspected daily and those inspections shall be recorded in the daily drilling report. Components shall be operated and tested as required by Onshore Oil & Gas Order No. 2 to insure good mechanical working order. All BOPE pressure tests shall be performed by a test pump with a chart recorder and **NOT** by the rig pumps. Test shall be reported in the driller's log.
- BOP drills shall be initially conducted by each drilling crew within 24 hours of drilling out from under the surface casing and weekly thereafter as specified in Onshore Oil & Gas Order No. 2.
- Casing pressure tests are required before drilling out from under all casing strings set and cemented in place.
- No aggressive/fresh hard-banded drill pipe shall be used within casing.
- **Cement baskets shall not be run on surface casing.**
- The operator must report all shows of water or water-bearing sands to the BLM. If flowing water is encountered it must be sampled, analyzed, and a copy of the analyses submitted to the BLM Vernal Field Office.
- The operator must report encounters of all non oil & gas mineral resources (such as Gilsonite, tar sands, oil shale, trona, etc.) to the Vernal Field Office, in writing, within 5 working days of

each encounter. Each report shall include the well name/number, well location, date and depth (from KB or GL) of encounter, vertical footage of the encounter and, the name of the person making the report (along with a telephone number) should the BLM need to obtain additional information.

- A complete set of angular deviation and directional surveys of a directional well will be submitted to the Vernal BLM office engineer within 30 days of the completion of the well.
- While actively drilling, chronologic drilling progress reports shall be filed directly with the BLM, Vernal Field Office on a weekly basis in sundry, letter format or e-mail to the Petroleum Engineers until the well is completed.
- A cement bond log (CBL) will be run from the production casing shoe to the top of cement and shall be utilized to determine the bond quality for the production casing. Submit a field copy of the CBL to this office.
- **Please submit an electronic copy of all other logs run on this well in LAS format to UT\_VN\_Welllogs@BLM.gov. This submission will supersede the requirement for submittal of paper logs to the BLM.**
- There shall be no deviation from the proposed drilling, completion, and/or workover program as approved. Safe drilling and operating practices must be observed. Any changes in operation must have prior approval from the BLM Vernal Field Office.



## OPERATING REQUIREMENT REMINDERS:

- All wells, whether drilling, producing, suspended, or abandoned, shall be identified in accordance with 43 CFR 3162.6. There shall be a sign or marker with the name of the operator, lease serial number, well number, and surveyed description of the well.
- For information regarding production reporting, contact the Office of Natural Resources Revenue (ONRR) at [www.ONRR.gov](http://www.ONRR.gov).
- Should the well be successfully completed for production, the BLM Vernal Field office must be notified when it is placed in a producing status. Such notification will be by written communication and must be received in this office by not later than the fifth business day following the date on which the well is placed on production. The notification shall provide, as a minimum, the following informational items:
  - Operator name, address, and telephone number.
  - Well name and number.
  - Well location (¼¼, Sec., Twn, Rng, and P.M.).
  - Date well was placed in a producing status (date of first production for which royalty will be paid).
  - The nature of the well's production, (i.e., crude oil, or crude oil and casing head gas, or natural gas and entrained liquid hydrocarbons).
  - The Federal or Indian lease prefix and number on which the well is located; otherwise the non-Federal or non-Indian land category, i.e., State or private.
  - Unit agreement and/or participating area name and number, if applicable.
  - Communitization agreement number, if applicable.
- Any venting or flaring of gas shall be done in accordance with Notice to Lessees (NTL) 4A and needs prior approval from the BLM Vernal Field Office.
- All undesirable events (fires, accidents, blowouts, spills, discharges) as specified in NTL 3A will be reported to the BLM, Vernal Field Office. Major events, as defined in NTL3A, shall be reported verbally within 24 hours, followed by a written report within 15 days. "Other than Major Events" will be reported in writing within 15 days. "Minor Events" will be reported on the Monthly Report of Operations and Production.
- Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (BLM Form 3160-4) shall be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3162.4-1. Two copies of all logs run, core descriptions, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, shall be filed on BLM Form 3160-4. Submit with the well completion report a geologic report including, at a minimum, formation tops, and a summary and conclusions. Also include deviation surveys, sample descriptions, strip logs, core data, drill stem test data, and results of production tests if

performed. Samples (cuttings, fluid, and/or gas) shall be submitted only when requested by the BLM, Vernal Field Office.

- All off-lease storage, off-lease measurement, or commingling on-lease or off-lease, shall have prior written approval from the BLM Vernal Field Office.
- Oil and gas meters shall be calibrated in place prior to any deliveries. The BLM Vernal Field Office Petroleum Engineers will be provided with a date and time for the initial meter calibration and all future meter proving schedules. A copy of the meter calibration reports shall be submitted to the BLM Vernal Field Office. All measurement facilities will conform to the API standards for liquid hydrocarbons and the AGA standards for natural gas measurement. All measurement points shall be identified as the point of sale or allocation for royalty purposes.
- A schematic facilities diagram as required by Onshore Oil & Gas Order No. 3 shall be submitted to the BLM Vernal Field Office within 30 days of installation or first production, whichever occurs first. All site security regulations as specified in Onshore Oil & Gas Order No. 3 shall be adhered to. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed in accordance with Onshore Oil & Gas Order No. 3.
- Any additional construction, reconstruction, or alterations of facilities, including roads, gathering lines, batteries, etc., which will result in the disturbance of new ground, shall require the filing of a suitable plan and need prior approval of the BLM Vernal Field Office. Emergency approval may be obtained orally, but such approval does not waive the written report requirement.
- No location shall be constructed or moved, no well shall be plugged, and no drilling or workover equipment shall be removed from a well to be placed in a suspended status without prior approval of the BLM Vernal Field Office. If operations are to be suspended for more than 30 days, prior approval of the BLM Vernal Field Office shall be obtained and notification given before resumption of operations.
- Pursuant to Onshore Oil & Gas Order No. 7, this is authorization for pit disposal of water produced from this well for a period of 90 days from the date of initial production. A permanent disposal method must be approved by this office and in operation prior to the end of this 90-day period. In order to meet this deadline, an application for the proposed permanent disposal method shall be submitted along with any necessary water analyses, as soon as possible, but no later than 45 days after the date of first production. Any method of disposal which has not been approved prior to the end of the authorized 90-day period will be considered as an Incident of Noncompliance and will be grounds for issuing a shut-in order until an acceptable manner for disposing of said water is provided and approved by this office.
- Unless the plugging is to take place immediately upon receipt of oral approval, the Field Office Petroleum Engineers must be notified at least 24 hours in advance of the plugging of the well, in order that a representative may witness plugging operations. If a well is suspended or abandoned, all pits must be fenced immediately until they are backfilled. The "Subsequent Report of Abandonment" (Form BLM 3160-5) must be submitted within 30 days after the actual plugging of the well bore, showing location of plugs, amount of cement in each, and amount of casing left in hole, and the current status of the surface restoration.